

## **REMARKS/ARGUMENT**

Claim 1-15 are pending in the instant application. Claim 15 has been cancelled. No claims have been added. Therefore, upon entry of the instant amendment, claims 1-14 will be pending.

### ***Drawings***

The drawings are objected to because reference character “10” is used in both figure1 and a multiplier for figure 2. The figures have been amended to correct errors in the drawings. Inputs into multipliers of outputting  $\hat{i}(n)$  and  $\hat{q}(n)$  should be 2. Inputs for multipliers for  $S_i(n)$  and  $S_q(n)$  are  $\frac{1}{2}$ . The line to multiplier in figure 2 is not a reference character but input of  $\frac{1}{2}$  into multiplier.

Claim 15 stands rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,920,353 to Diaz et al. Applicant respectfully traverses this rejection, as set forth below.

### ***Specification***

The disclosure is objected to because of informalities. Applicants have Amended the specification to correct the informalities.

### ***Claims Objections***

Claims 12-14 were objected to because of informalities. The informalities have been corrected.

### ***Claims Rejections – 35 USC § 112***

Claim 15 has been rejected under 35 U.S.C. §112, second paragraph. Claim 15 has been cancelled so the rejection is moot.

### ***Claims Rejections – 35 USC § 102***

In order that the rejection under 35 U.S.C. §102 be sustainable, it is fundamental that “each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference.” Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, “The identical invention must be shown in as complete detail as is contained in the ... claim”.

Furthermore, “all words in a claim must be considered in judging the patentability of that claim against the prior art.” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Claims 7 and 15 has been rejected under 35 U.S.C. §102(b) as being anticipated by Mohindra (WO 200225846 A). Applicant traverses this rejection. Claim 15 has been cancelled so the rejection as to claim 15 is moot.

Regarding claim 7, the approach of Mohindra (WO 200225846 A) is an analog domain approach to fixing IQ impairments. Embodiments of the instant application are fully digital signal processing based. Applicants have stated that “using analog components causes phase, gain and delay mismatches (Page 1 of instant application). Additionally, the algorithm of Mohindra is one that is based on measurement of injected specific signals and calibrating according to these

measurements. The embodiments of instant application is completely blind and does not assume anything on the received signal.

Claims 7 and 15 has been rejected under 35 U.S.C. §102(a) as being anticipated by Landing (EP 1298791 A1). Applicant traverses this rejection. Claim 15 has been cancelled so the rejection as to claim 15 is moot.

Regarding claim 7, as in Mohindra (WO 200225846 A) the approach in Landing (EP 1298791 A1).is an analog domain. Embodiments of the instant application are fully digital signal processing based. Applicants have stated that “using analog components causes phase, gain and delay mismatches (Page 1 of instant application). Additionally, the solution of Landing (EP 1298791 A1) is one that is based on measurement of injected specific signals and calibrating according to these measurements. The embodiments of instant is completely blind and does not assume anything on the received signal.

Claims 1-15 were rejected under 35 U.S.C. §102(a) as being anticipated by Chien (US 20040203472 A1). Applicant traverses this rejection. Embodiments of the claims digitally work directly on the useful signal even the amplified noise and do not require injection of an external signal.

In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or

suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

Respectfully submitted:

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